Fourfold Logic: an analysis and mapping of values, motivation and behavior

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November, 2025

Summary

This article aims to illustrate the four "layers" of my Four Logic model using core concepts from psychology and organization/management. The layers are Layer 1: Purpose, Mission, Intention; Layer 2: Norms, Boundary, Interface; Layer 3: Planning and Strategy; Layer 4: Behavior, Execution. The function of each layer is clarified by means of targeted questions.

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Questions about layers one to four

Q. How are motivation and values connected? Is there a link with layer 2 of my model, or is this a layer 1 matter?

Claude: Motivation and values are closely linked and touch, in your model, both layer 1 and layer 2—but in different ways and at different levels.

Layer 1 (Purpose, Mission, Intention):

- Values essentially belong to layer 1; they articulate the highest, norm-setting principles ("why", guiding framework) for a person, group, or system.
- These values form the foundation for motivation, because they give direction

to basic goals, aspirations, and the deeper 'why' for action.

- Motivation at this level is intrinsic: someone feels inwardly called/purposeful because it matches who they want to be or what they find meaningful.

Example:

- "I want to contribute to sustainability because I consider that value guiding."
- "Our organization puts integrity first—that determines what we motivate ourselves for."

Layer 2 (Norms, Boundary, Interface):

- Values are concretized into norms, rules, and behavioral expectations in layer 2.
- Here, motivation works as social energy: you want to comply, belong, not be excluded. It is more socially intrinsic and extrinsic: motivation to remain part of the group, avoid punishment/rejection, or to do good according to the norm.
- Motivation in layer 2 is often about norm-conform behavior, endorsing collective values, and maintaining status/relationships.

Example:

- "I stick to this code because that's how it's done in our team."
- "I feel motivated to follow a norm because it earns me appreciation or acceptance."

Connectedness between the layers:

- Values in layer 1 are guiding, but real, everyday behavioral motivation is strongly filtered/buffered by the norms, feedback, and behavioral rules of layer 2.
- A norm can stem from a value (layer 2 born out of layer 1), but it can sometimes also conflict with your deeper values (value-motivation vs. norm-motivation = conflict dynamic, cognitive dissonance).
- Often values not realized in norms (walk vs. talk) are the source of motivation problems.

Summary:

- Values = layer 1 (first principles; "why/what is truly important?")
- Norms/rules, social pressure, interface behavior = layer 2 (concrete filling-in, "how should it be done?")
- Motivation stands between these two:
    - Deep motivation is rooted in values (1),
    - Daily, situational motivation is mediated by norms (2).

Synthesis: Motivation is a bridge between layer 1 (values/purpose) and layer 2 (norms/boundary), and intrinsic motivation, norm following, or resistance/friction depends on the degree of congruence between the two.

Question on the relation between meaning and value:

When we attribute meaning to something, do we attach value to something? What is the connection?

Yes, when we attribute **meaning** to something, we often implicitly or explicitly attach **value** to it. The connection between meaning and value is deeply rooted in psychology, philosophy, and systems theory:

How Meaning and Value Interact

- **Meaning** is the subjective significance, relevance, or sense we assign to a person, object, experience, idea, or situation. It answers the question "Why does this matter?" or "What does this represent for me?"
- **Value** is the worth, priority, or importance we assign—strongly linked to our personal or shared priorities, ethics, and goals.

Connection:

- Attributing meaning is often the *process* of recognizing, discovering, or affirming value. When something is meaningful to us, it's usually because it aligns with—or even embodies—our values.
- Conversely, what we value becomes meaningful because it connects to our needs, aims, ideals, or relationships.

Examples:

- The experience of friendship feels meaningful *because* we value connection and trust.
- A work of art is meaningful if it embodies beauty, expression, or cultural value important to us.
- A goal (like finishing a project) holds meaning *if* it is in accord with values (achievement, contribution, growth).

Theoretical Perspective

- Viktor Frankl (logotherapy) argued that "meaning" is not separate from value: "Meaning is the foremost value for human motivation."
- In systems theory and your Fourfold Logic: **Layer 1** (purpose/values/meaning) sets the "why." Meaning and value are mutually reflective—meaning crystallizes what we value, and value gives meaning weight and direction.

Summary:

- Assigning meaning is synonymous with attaching value, because meaning always implies importance or relevance.
- What is meaningful is valued; what is valued acquires its deepest meaning.
- This process underlies motivation, prioritization, and personal or collective identity.

Q. After motivation comes planning, strategy and behavior. Does this happen in layer 3 and 4?

Yes, your analysis is correct: after motivation (rooted in values and norms, mainly layer 1 and 2), planning, strategy and behavior primarily appear in layers 3 and 4 of your model. Here is how these steps are systematically integrated:

Layer 3: Planning and Strategy

- **Function:** Involves purposeful coordination, choosing among alternatives, action programs and scenarios.
- Strategy translates motivation/values (layer 1) and norms/conditions (layer 2)

into an action plan: “how do I concretize this goal given this context and limitation?”

- **In biology:** The prefrontal cortex makes plans, plans motor actions, creates scenarios.
- Organisms (or teams/organizations) formulate strategies (hunting, cooperation, problem-solving).
- **In organizations:** Formulating policy, decision rules, project planning and roadmaps.

Layer 4: Behavior/Execution

- **Function:** Actual activity, tangible action, physical execution of strategy—here the plan enters reality.
- Direct motor output, interaction with environment, adjusting (“fine-tuning”) performance based on feedback.
- **In biology:** Muscle contractions, speech, actual behavioral expression.
- On the cellular level: implementation of signal transduction, gene expression, effector reactions.
- **In organizations:** Implementation, project execution, operational actions.
- Actual observable behavior of people in practice.

Synthesis (sequence):

1. Values (layer 1)
2. Norms (layer 2)
3. Motivation (bridge between 1 & 2)
4. Planning and Strategy (layer 3)
5. Behavior/Execution (layer 4)

Each subsequent layer operationalizes and realizes what was laid out as potential, rule or motivation in the previous layers.

In short:

- Yes, planning and strategy = layer 3.
- Behavior/execution = layer 4.

- Feedback from layer 4 can lead to strategy adjustment (layer 3) or even revision of norms/values (layer 2/1).

Q. Motivation grounded in values and norms, mainly layer 1 and 2. Why mainly? Can it also be found in layer three?

That is a perceptive question! Motivation can indeed also be connected with layer 3—and sometimes the primary source of motivation lies mainly in layer 3.

Nuance: motivation in the layers

- **Layer 1 (values/mission):**
  The deepest, most "self-transcendent" motivation (intrinsic, purpose- or meaning-oriented) is rooted here.
- **Layer 2 (norms/boundary):**
  Motivational energy to belong to the group, norms, be accepted—much daily social behavior and "status motivation" is rooted here.
- **Layer 3 (strategy/planning, goal optimization):**
  Motivation can also primarily arise here, namely:
    - From *prospects of success* ("I do it because it works, there are advantages, effectiveness").
    - From *reward vs. punishment* (instrumental motivation—e.g. bonus, result, efficiency advantages of strategy).
    - Through *problem-solving behavior*: motivation to eliminate frustration or obstacles (not from values, but from solution orientation).

In some contexts (for instance in behavioral psychology, organizational science or "goal-setting theory"), motivation is even defined as part of the strategic steering layer: what drives you is the result of estimating chance, reward, cost/benefit, and attuning internal commitment to perceived feasibility.

Example:

- Someone is not necessarily intrinsically motivated by value X, but because he/she sees a smart way/strategy to achieve something (for example, a problem solution, reward, ambition).
- "I want to earn my PhD, because the steps have been laid out logically and are achievable in my planning" (strategic motivation, layer 3).

Synthesis: motivation can exist on all layers

- Main motivation lies in layer 1 or 2 when determined by values/goals or norms/acceptance.

- Instrumental or strategic motivation often comes from layer 3: “how do I achieve it; what does it bring; am I competent?”.
- Motivational feedback from successes/failures (layer 4) can strengthen or weaken motivation (via dopamine, etc.), making behavior itself motivating.

Thus: motivation is layered, can arise primarily or secondarily from any layer, and is fundamentally a cyclical, dynamic process throughout the system.

Q. The fight, flight or freeze reaction: is this motivation at level 4 (physical, organismal)?

The fight, flight or freeze reaction in your Fourfold Logic model is above all a phenomenon of execution in layer 4 (physical, organismal)—but it always results from *higher-layer management*.

Analysis per layer:

- **Layer 1 (values/intentions):** In acute situations, “purpose” narrows to mere survival, but this layer directs the basic orientation: do I want to fight, flee, or freeze for ultimate preservation?
- **Layer 2 (norms, boundary):** Norms or context can determine which response options are socially or contextually accepted (for example, fighting may be undesirable in some situations).
- **Layer 3 (strategy/planning):** The brainstem (layer 3) quickly chooses between fight, flight, or freeze (survival strategies), depending on threat appraisal, strength, escape route, past experience.
- **Layer 4 (execution):** Here you find the actual motor and physiological response:
    - Fight: muscle activation, adrenaline, elevated heart rate.
    - Flight: running/escaping, coordination of super-fast reflexes.
    - Freeze: inhibition of movement, immobilization, apparent paralysis, often with bradycardia via the dorsal vagus ("polyvagal theory").

Motivation in fight/flight/freeze:
The motivation to move (“I want to escape or fight”) is physically mediated via

hormones and neural signals, leading immediately to action (layer 4).
It is a *primarily executive and organismic phenomenon*: direct management, with survival as its overriding aim—no conscious deliberation, just pure survival.

So:

- Fight/flight/freeze are behavioral outputs at layer 4, directly triggered by stress-response systems from the brainstem/autonomic nervous system,
- But *always* arise from *higher-layer signaling*—prefrontal, limbic, contextual.

Fig. 1. Visual mapping of motivational processes per layer (fourfold model)

The diagram shows how motivation flows from values (purpose, layer 1) through norms (layer 2), strategy/planning (layer 3), to behavior/execution (layer 4). Arrows illustrate top-down control and feedback loops; each block is provided with a key quote relevant to that layer. Layer four is concerned with physical execution. The example shown is a fight, flight or freeze reaction (a stress response, appearing as motivational-behavioral output).

Cited Quotes from Literature on Motivation per Layer

Layer 1 (Values, intrinsic motivation)

- **Edward Deci (Self-Determination Theory):**
  "Autonomy is an essential aspect of being human—it's the capacity to endorse one's actions at the highest level of reflection."
  en:
  "The highest-quality motivation is self-determined or autonomous."
  "The primary agentic aspect of human beings is their intrinsic motivation."
  (Deci, cited via achology.com and SelfDeterminationTheory.org)
  selfdeterminationtheory+2

Layer 2 (Norms and social motivation)

- **Eccles & Wigfield (2002):**
  "Individuals have motives to avoid failure (Maf), and [...] motivation was determined by both stable dispositions and more situated or task specific beliefs and values regarding both the tendencies to approach or avoid a given activity."
  (Eccles, in "Motivational beliefs, values, and goals" — Annual Review of Psychology, 2002) scribd
- **Hitlin & Piliavin (2004):**
  "Values: Reviving a Dormant Concept."
  (Sociale normen en waarden bepalen motivatie voor actie in sociale settings)
  rjpn

Layer 3 (Strategy, planning, goal optimization)

- **Seong-Gi Kim (2013):**
  "Motivation can be parsed into three sub processes, a process of generating motivation, a process of maintaining motivation, and a process of regulating motivation. [...] I focused on pleasure, value, and goal as principal units of analysis on psychological level because their underlying neural mechanisms have been heavily investigated and relatively well identified."
  (Neuroscientific Model of Motivational Process — Frontiers in Psychology, 2013) pmc.ncbi.nlm.nih

Layer 4 (Execution, behavioral level)

- **Simpson, Behavioral Neuroscience of Motivation:**
  "The psychological processes that drive motivated behavior and the

anatomical, electrophysiological and neurochemical mechanisms which drive these processes and regulate behavioural output."
(Behavioral Neuroscience of Motivation, 2016) goodreads

- **Porges, Polyvagal Theory:**
"To switch effectively from defense to social engagement strategies, the nervous system must do two things: (1) assess risk, and (2) if the environment looks safe, inhibit the primitive defensive reactions to fight, flight or freeze."
(Polyvagal Theory, geciteerd via goodreads.com) goodreads

Layered Architecture

- Understanding the layered brain architecture for motivation (2025):
"Conflicts between motivational systems are resolved partly through localized circuits and partly through distributed mechanisms involving multiple layers of the neuraxis that can be understood as forming a layered control architecture."
(Elsevier, 2025) eprints.whiterose

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3. https://www.apa.org/members/content/intrinsic-motivation
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